

# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5 77 WEST JACKSON BOULEVARD CHICAGO, IL 60604-3590

## SEP 29 2017

REPLY TO THE ATTENTION OF:

# CERTIFIED MAIL RETURN RECEIPT REQUESTED

Mike Twomley, Plant Manager DTE Energy – Monroe Power Plant 3500 East Front Street Monroe, Michigan 48161

Re:

Finding of Violation

DTE Energy - Monroe Power Plant

Monroe, Michigan

Dear Mr. Twomley:

The U.S. Environmental Protection Agency is issuing the enclosed Finding of Violation (FOV) to DTE Energy Company – Monroe Power Plant (you) under Section 113(a)(3) of the Clean Air Act, 42 U.S.C. § 7413(a)(3). We find that you have violated the National Emission Standards for Hazardous Air Pollutants at the Monroe Power Plant located in Monroe, Michigan.

Section 113 of the Clean Air Act gives us several enforcement options. These options include issuing an administrative compliance order, issuing an administrative penalty order and bringing a judicial civil or criminal action.

We are offering you an opportunity to confer with us about the violations alleged in the FOV. The conference will give you an opportunity to present information on the specific findings of violation, any efforts you have taken to comply and the steps you will take to prevent future violations. In addition, in order to make the conference more productive, we encourage you to submit to us information responsive to the FOV prior to the conference date.

Please plan for your facility's technical and management personnel to attend the conference to discuss compliance measures and commitments. You may have an attorney represent you at this conference.

The EPA contact in this matter is Victoria Nelson. You may contact her at (312) 886-9481 or nelson.victoria@epa.gov to request a conference. You should make the request within 10 calendar days following receipt of this letter. We should hold any conference within 30 calendar days following receipt of this letter.

Sincerely,

Edward Nam

Director

Air and Radiation Division

Enclosure

cc: Andrea E. Hayden, Attorney, DTE Energy

Thomas Hess, Unit Supervisor, MDEQ

# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 5

IN THE MATTER OF:	)
	)
DTE Energy Company	)
Monroe Power Plant	) FINDING OF VIOLATION
Monroe, Michigan	)
	) EPA-5-17-MI-5
Proceedings Pursuant to	j
the Clean Air Act,	ý
42 U.S.C. §§ 7401 et seq.	)
	j

#### FINDING OF VIOLATION

The U.S. Environmental Protection Agency (EPA) is issuing this Finding of Violation (FOV) in accordance with Section 113(a)(3) of the Clean Air Act (CAA), 42 U.S.C. §§ 7413(a)(3). The authority to issue this FOV has been delegated to the Regional Administrator of the EPA, Region 5, and re-delegated to the Director of the Air and Radiation Division.

EPA finds that DTE Energy Company (DTE or you) has violated the CAA, 42 U.S.C. § 7412. Specifically, DTE has violated the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Coal- and Oil-Fired Electric Utility Steam Generating Units Subpart UUUUU at the Monroe Power Plant (the Facility), located in Monroe, Michigan, as follows:

#### Regulatory Authority

## National Emission Standards for Hazardous Air Pollutants

- 1. Section 112 of the CAA, 42 U.S.C. § 7412, requires EPA to promulgate a list of all categories and subcategories of new and existing "major sources" and "area sources" of hazardous air pollutants (HAP) and establish emissions standards for the categories and subcategories. These emission standards are known as the National Emission Standards for Hazardous Air Pollutants (NESHAP). EPA codified these standards at 40 C.F.R. Parts 61 and 63.
- 2. "Major source" is defined under the CAA as "any stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit considering controls, in the aggregate, 10 tons per year or more of any hazardous air pollutant or 25 tons per year or more of any combination of hazardous air pollutants." 40 C.F.R. § 63.2 and 42 U.S.C. § 7412(a)(1).
- 3. "Area source" is defined under the CAA as "any stationary source of hazardous air pollutants that is not a major source." 40 C.F.R. § 63.2 and 42 U.S.C. § 7412(a)(2).
- 4. "Stationary source" is defined under the CAA as "any building, structure, facility, or

- installation, which emits or may emit any air pollutant." 40 C.F.R. § 63.2 and 42 U.S.C. § 7411(a)(3).
- 5. "Hazardous air pollutant" is defined under the CAA as "any air pollutant listed in or pursuant to" Section 112(b) of the CAA. 40 C.F.R. § 63.2 and 42 U.S.C. § 7412(a)(6).
- 6. Section 112(i)(3) of the CAA, 42 U.S.C. § 7412(i)(3), prohibits any person subject to a NESHAP from operating a source in violation of a NESHAP after its effective date. See also 40 C.F.R. §§ 61.05 and 63.4.
- 7. 40 C.F.R. Part 63, Subpart A, contains the General Provisions for the NESHAP.

## NESHAP for Coal- and Oil-Fired Electric Utility Steam Generating Units

- 8. Pursuant to Section 112 of the CAA, EPA promulgated the NESHAP Subpart UUUUU at 40 C.F.R. Part 63, Subpart UUUUU, 40 C.F.R. §§ 63.9980 63.10042, on February 16, 2012. 77 Fed. Reg. 9464.
- 9. NESHAP Subpart UUUUU applies to owners and operators of coal- and oil-fired electric generating units. 40 C.F.R. § 63.9981.
- 10. 40 C.F.R. § 63.9982(d) provides that an affected source is existing if it commenced construction or reconstruction of the affected source on or before May 3, 2011.
- 11. 40 C.F.R. § 63.9984(b) states that an existing affected source must comply with the NESHAP Subpart UUUUU no later than April 16, 2015.
- 12. 40 C.F.R. § 63.10000(b) provides that, at all times, owners and operators must operate and maintain any affected source, including air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions.
- 13. 40 C.F.R. § 63.9991(a)(1), referencing Table 2 to NESHAP Subpart UUUUU, states that an existing coal-fired unit that is not combusting low rank virgin coal must comply with a mercury (Hg) emission limit of 1.2 lb/TBtu.
- 14. 40 C.F.R. § 63.10010(g) states that if a Hg sorbent trap monitoring system is used, it must be installed, certified, operated, maintained and the data must be quality-assured in accordance with the NESHAP Subpart UUUUU Appendix A Hg Monitoring Provisions (Hg Monitoring Provisions).
- 15. 40 C.F.R. § 63.10021(b) provides that continuous compliance must be demonstrated using all quality-assured hourly data recorded by a sorbent trap monitoring system and other required monitoring systems (e.g. flow rate, CO<sub>2</sub>, O<sub>2</sub>, or moisture systems) to calculate a 30-boiler operating day rolling arithmetic average Hg emission rate that is updated at the end of each new boiler operating day.

#### Relevant Factual Background

- 16. DTE is a "person," as that term is defined in Section 302(e) of the CAA, 42 U.S.C. § 7602(e).
- 17. DTE owns and operates a coal-fired electric utility steam generating unit identified as "EU-UNIT2-S1" (Unit 2) at 3500 East Front Street, Monroe, Michigan. Hg emissions from Unit 2 are continuously monitored with a sorbent trap monitoring system.
- 18. On September 15, 2016, in its ROP Semiannual Compliance Certification Report, DTE reported a deviation of Unit 2 from the Hg emission limit identified in Paragraph 13, above, that occurred from May 22, 2016 through June 23, 2016. The duration of this deviation is 33 days.
- 19. DTE discovered the deviation identified in Paragraph 18 above on June 9, 2016. DTE reported this emission exceedance 68 business days after the date of discovery.
- 20. On September 23, 2016, DTE reported to MDEQ that a second deviation of Unit 2 from the Hg emission limit identified in Paragraph 13 occurred from August 5, 2016 through August 22, 2016. The duration of this deviation is 18 days.
- 21. On September 29, 2016, MDEQ sent DTE a violation notice (VN) for the deviation identified in Paragraph 18 with a response to this VN due October 13, 2016.
- 22. On October 10, 2016, DTE requested a 3-week extension for the response to the VN due on October 13, 2016. MDEO granted this extension on October 13, 2016.
- 23. On November 9, 2016, DTE submitted the VN response identified in Paragraph 22 detailing the two emission exceedances identified above.
- 24. On December 22, 2016, MDEQ sent DTE a VN for the deviation identified in Paragraph 20.
- 25. On February 14, 2017, MDEQ referred the matter to EPA after determining they were not delegated the authority to enforce NESHAP Subpart UUUUU.

## Finding of Violations

- 26. By exceeding the Hg emission limit during the time periods starting on May 22, 2016 and ending on June 23, 2016, and starting on August 5, 2016 and ending on August 22, 2016, DTE has violated 40 C.F.R. § 63.9991(a)(1).
- 27. By failing to operate and maintain the air pollution control system associated with Unit 2 with good air pollution control practices for minimizing emissions, DTE has violated 40 C.F.R. § 63.10000(b).

## **Environmental Impact of Violations**

- 28. DTE's violations of the above-referenced NESHAP have caused excess emissions of elemental mercury. Acute and/or prolonged exposure to elemental mercury in humans results in central nervous system effects, including:
  - Tremors
  - Emotional changes
  - Insomnia
  - Neuromuscular changes
  - Headaches
  - Disturbances in sensations
  - Changes in nerve responses
  - Poor performance on tests of mental function

Higher exposures may also cause kidney effects, respiratory failure and death.

7/59/11 Date

Edward Nam

Director

Air and Radiation Division

#### **CERTIFICATE OF MAILING**

I certify that I sent a Finding of Violation, No. EPA-5-17-MI-5, by Certified Mail, Return Receipt Requested, to:

Mike Twomley, Plant Manager
DTE Energy – Monroe Power Plant
3500 East Front Street
Monroe, Michigan 48161
Altice # 7016 137000157199933

I also certify that I sent copies of the Finding of Violation by first-class mail to:

Andrea E. Hayden, Attorney DTE Energy One Energy Plaza Detroit, Michigan 48226-1279

Thomas Hess, Unit Supervisor Compliance and Enforcement Section Michigan Department of Environmental Quality Air Quality Division P.O. Box 30260 Lansing, Michigan 48909

Jeff Rathbun
Air Quality Division, Enforcement Unit
Michigan Department of Environmental Quality
Constitution Hall, South Tower, 2nd Floor
525 West Allegan Street
P.O. Box 30473
Lansing, MI 48909-7973

On the 29 day of Septem Qc 2017

Kathy Jones

Program Technician

AECAB, PAS